Class Project – Beginning Programming – CS41

v. 150807

Per syllabus – this is the class project for those that have chosen a grade or credit option (see syllabus for details).

Project Due Date:

While I would prefer to get the project earlier rather than later. The final deadline for the project is the last class at 9:00 pm Pacific. Anything handed after this point in time will be considered late and points will be taken away for this.

What you need to hand-in:

- 1. php file(s) that I can run under XAMPP to do test the functionality for the project (i.e. what is described below)
- A text file that describes the following (please no .docx files, just simple text file or put the contents of this in email you send to me):
 - What challenges did you encounter?
 - If you had problems completing the project record the issues that you had.

Please keep in mind to hand in the basic items that I am asking for. You should be able to create this project based on what you learned in class (by Week 3 you have all the info you need for this project). If you wish to make it more fancy, you are welcome to do so but first focus *on doing the basic functionality*.

How to submit the project:

You should submit the project in the following way:

- 1. If you have 10 files or less please add all these files as attachments to an email that you send to me. This can be via regular email or by using the Canvas inbox. Note that most students typically have 3 files (the challenges files, sender file, and receiver file).
- 2. If you have more than 10 files to send me, then you may do so by creating a *zip* file and attaching it to an email that you send me. The zip file will contain all of the files that you created (please do not send a zipx file).
 - WARNING For Mac users that put their files in a zip file: please be very careful to not send me alias files. Alias files are a way to have a shortcut on your file system. They are not the actual file. This means that if you send me the alias files for your project I wont be able to check and grade your project. This in turn will result in a

delay when I email and ask you to send me your actual files (if I don't hear back from you - I have to change your grade option to NGR since I cannot grade your project). To understand how alias files work please read the following: http://www.dummies.com/how-to/content/how-to-make-a-mac-alias-shortcut.html

After submitting your project I will reply to your email confirming that I received your project. *If you don't receive such a reply, then assume that I did NOT get your project.* In this case, please contact me so we can figure out how I can get your project. The excuse "I emailed you the project...you mean you didn't get it?" wont be accepted.

Project Back Story:

You've been selected by Santa Claus (you're his internet elf) to write a simple web page that will help let people know whether they are on the naughty or nice list. You object but he points to the Stanford Continuing Studies Beginning Programming class that you've been taking so you agree to do it (not that you had much of a choice to begin with – it is Santa after all).

You look around the web and you find a site that you could model - http://www.emailsanta.com/naughty_nice.asp. You decide to use this as your model for Santa's naughty/nice web page. However you are going to use PHP and your pages will be much cleaner.

Project Details:

You can make this project as simple or complex as you want. However, start by making the simplest application possible and then make it more complex if you have time.

Your site will consist of 2 basic pages. The input page is where you will ask the person whether they were naughty or nice (you need to have a minimum of 4 questions with at least 2 possible answers per question). In the second page, based on their answers – you will provide a simple certificate indicating if they are naughty or nice.

You can directly use the information from the page at http://www.emailsanta.com/naughty_nice.asp (in other words - use the same questions or you can make up your own questions).

So your first page (input page from the user) will have something like this (no need to make it pretty – just functional):

~ The Incredible Elf-o-matic Naughty or Nice Determinator ~



After a person puts their name and submits the answer to the questions based on the drop downs. Based on those answers – a result page is shown to them indicating whether they're naughty or nice.

Example of result for nice (your page can be much simpler than this):

The Official "Naughty or Nice" Ranking for Eli: Nice (A+)

> Dated this Monday, July 07, 2008 At The North Pole



Ho! Ho! Ho! Eli!

Congratulations Eli!! You really are so good that you should be the angel

on top of the tree!

Everyone at the North Pole, including me, is very proud of you Eli! Keep up the wonderful work!

Merry Christmas!

Santa Claus

Important Notice: A certified copy of this "Naughty or Nice" ranking has been placed in a special high-security vault in the offices of Santa's accounting firm of "Elf, Elf & Galoshes" and cannot be removed until Christmas Eve. Merry Christmas!

Example of page for naughty:

The Official "Naughty or Nice" Ranking for Eli: Little Stinker

> Dated this Monday, July 07, 2008 At The North Pole

My Goodness, Eli!

You're a real little stinker aren't you! The elves have been talking for a while about whether they can find a lump of coal big enough for you!

I have to be honest with you Eli, at the rate you're going, it's not looking good for you this year... or next year... or the year after that... (*wink*). Mind you, Mrs. Claus and I have a funny feeling you rather enjoy being a scamp! (*wink*)

Merry Christmas!



P.S. You aren't really going to leave me smelly socks for a snack are you?

Important Notice: A certified copy of this "Naughty or Nice" ranking has been placed in a special high-security vault in the offices of Santa's accounting firm of "Elf, Elf & Galoshes" and cannot be removed until Christmas Eve. Merry Christmas!

Hints for doing project and how to approach it:

- Play with the functionality of the site at http://www.emailsanta.com/naughty_nice.asp
- Start by keeping everything simple: basic html page with a form (just like the in-class exercises) and 1 question on the sender side (you don't need php for the sender). Get this to work and put another question.
- Use the drop down text and form structure from the above site (do a view source and get the form drop down paragraphs). Make it easy on yourself. For the logic of how to determine the naughty/niceness of a person look at how emailsanta.com structured the drop down option numbers. You should use numbers for the values corresponding to each question. On the receiver side you need to do something with these numbers to determine naughtiness or niceness.

- Your form (i.e. "sender" side) **should be in html only** initially. If you find yourself using loops or foreach type structures you're making it more complicated than it needs to be. You can make it more complicated and use PHP after you've gotten the basic sender file to work.
- For the results page (i.e. receiver)
 - use the print_r function (http://php.net/manual/en/function.print-r.php) to figure out what you are
 getting in the superglobal variable since that is the only data you have available. For example if you are
 using a post method to send your data then at the top of your receiver file you can put:

```
print r($ POST);
```

- keep it simple. You can start with just a page that uses the
 user's name with the words "naughty" or "nice". For example, if the user(let's say his name is Bob) was
 naughty, it can just say: "You have been naughty Bob no gifts for you." Alternatively, if the user was
 nice, then something like: "You have been nice Bob lots of gifts for you.
- You don't need to use extract function that we used in labs...if
 you do use it make sure you understand how it works. Otherwise use the supergobals \$_GET or
 \$_POST depending on the form method that you chose on the sender side
- For troubleshooting purpose you may want to put the following at the top of your php code:

```
error_reporting(E_ALL);
```

For more details about this built in php function please visit: http://www.php.net/manual/en/function.error-reporting.php

 If you want to make it more fancy you can use templates from http://www.freecsstemplates.org/ or any other site that you want to use. Remember that your grade depends on the *functionality* of the web pages not their beauty or aesthetics (those are nice but not required).

Extra Credit:

Extra credit will be awarded to those that:

- 1. In addition to the drop down questions have the:
 - checkboxes
 - radio buttons as part of the form
- 2. Use Wordpress's coding convention (which can be found at: https://make.wordpress.org/core/handbook/best-practices/coding-standards/php/). This will make your code extra easy to read.